

WHAT IS CLAIMED IS:

1. A liquid spraying apparatus comprising:
 - a spray gun,
 - 5 a reservoir for a liquid to be sprayed,
 - a connector that connects the reservoir to the spray gun to permit liquid to be withdrawn from the reservoir, the connector being releasable for detaching the reservoir from the spray gun, and
 - a security clip for restricting release of the connector.
- 10 2. The liquid spraying apparatus of claim 1, wherein the connector comprises mateable formations on the reservoir and spray gun that are engageable to secure the reservoir to the gun with an outlet of the reservoir in communication with an inlet of the gun, and the security clip is operable
- 15 to maintain engagement of the mateable formations.
3. The liquid spraying apparatus according to claim 2, wherein the mateable formations are engageable with a push/twist action to secure the reservoir to the spray gun and the reservoir can be released by a reverse
- 20 action to disengage the mateable formations.
4. The liquid spraying apparatus according to claim 1, wherein the reservoir is provided with a pair of hook members co-operable with a flange on the spray gun to secure the reservoir to the spray gun.
- 25 5. The liquid spraying apparatus according to claim 4, wherein the flange has a pair of recesses arranged to pass a distal end of the hook members to connect the reservoir outlet to the spray gun inlet and the reservoir is rotatable relative to the spray gun to position the distal end of
- 30 the hook members over a surface of the flange to prevent axial separation of the reservoir and spray gun.

6. The liquid spraying apparatus according to claim 5, wherein the security clip comprises a retainer part movable between an inoperative position in which the reservoir can be connected to and disconnected from the spray gun and an operative position in which disconnection of the reservoir is restricted.
7. The liquid spraying apparatus according to claim 6, wherein the retainer part is releasably held in the operative position.
8. The liquid spraying apparatus according to claim 7, wherein the retainer part is held in the operative position by friction or by interengageable formations.
9. The liquid spraying apparatus according to claim 6, wherein the retainer part is biased to the operative position.
10. The liquid spraying apparatus according to claim 9, wherein the retainer part is resiliently biased by a spring.
11. The liquid spraying apparatus according to claim 6, wherein the retainer part restricts relative rotation of the reservoir and spray gun in the operative position so as to maintain engagement of the mateable formations securing the reservoir to the spray gun.
12. The liquid spraying apparatus according to claim 6, wherein the retainer part is axially slidable towards and away from a flange on the spray gun, and wherein the retainer part has a pair of lugs that are received in recesses in the flange and a pair of notches to receive the hook members in the operative position.
13. The liquid spraying apparatus according to claim 6, wherein the flange is provided by an inlet adaptor secured to the spray gun and the

retainer part is located on the adaptor for movement between the operative position and the inoperative position.

14. The liquid spraying apparatus according to claim 13, wherein the
5 inlet adaptor comprises a tubular body having a first end connectable to the spray gun inlet and a second end connectable to the reservoir outlet with an internal through bore extending between the ends.

15. The liquid spraying apparatus according to claim 14, wherein the
10 flange is provided at or near the second end of the adaptor and the retainer part comprises a ring-shaped clip slidably mounted on the body between the flange and the first end for axial movement towards and away from the flange.

16. The liquid spraying apparatus according to claim 15, wherein the
15 clip is rotatable to align the lugs with the recesses in the flange.

17. The liquid spraying apparatus according to claim 15, wherein the
clip is guided for axial movement with the lugs aligned with the recesses.
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18. The liquid spraying apparatus according to claim 14, wherein the
first end has a screw threaded portion for engagement with a
complementary screw threaded portion on the spray gun to connect the
adaptor to the gun inlet.

19. The liquid spraying apparatus according to claim 14, wherein the
25 second end has a socket to receive a spigot or tube on the reservoir to connect the adaptor to the reservoir outlet.

20. The liquid spraying apparatus according to claim 1, wherein at least
30 part of the reservoir is re-usable.

21. The liquid spraying apparatus according to claim 20, wherein the reservoir comprises a rigid pot.
22. The liquid spraying apparatus according to claim 20, wherein the
5 reservoir comprises an outer container, an inner liner received within the outer container, a lid closing the liner and secured by a collar connected to the outer container, the arrangement being such that the lid/liner assembly can be removed and discarded after use with the outer container and collar being re-usable.
- 10 23. The liquid spraying apparatus according to claim 1, wherein the spray gun is gravity fed.
24. The liquid spraying apparatus of claim 1, wherein the spray gun is
15 suction fed.
25. The liquid spraying apparatus according to claim 1, wherein the spray gun is pressure fed.
- 20 26. An inlet adaptor for connecting a reservoir to a spray gun, the adaptor having a connector part engageable with a connector part on the reservoir and a retainer part for maintaining engagement of the connector parts.
- 25 27. The inlet adaptor according to claim 26, wherein the inlet adaptor comprises a tubular body having a first end for connection to the spray gun and a second end for connection to the reservoir with an internal through bore extending between the first and second ends for transferring liquid from the reservoir to the spray gun.
- 30 28. The inlet adaptor according to claim 27, wherein the first end has a screw threaded portion for connecting the adaptor to an inlet on the gun and

the second end has a socket for connecting the adaptor to an outlet on the reservoir.

29. The inlet adaptor according to claim 28, wherein the connector part
5 on the adaptor comprises an external flange on the body between the ends
and the connector part on the reservoir comprises a pair of hook members
arranged on opposite sides of the reservoir outlet and co-operable with the
flange to secure releasably the reservoir to the second end of the adaptor.

10 30. The inlet adaptor according to claim 29, wherein the flange has a
pair of recesses arranged to pass distal ends of the hook members when the
reservoir outlet is inserted into the socket and the reservoir is rotatable to
engage the distal ends of the hook members behind the flange to secure the
reservoir to the adaptor.

15 31. The inlet adaptor according to claim 29, wherein the retainer part
comprises a ring-shaped member located on the adaptor body between the
flange and the first end and movable axially on the adaptor body between
an inoperative position in which the reservoir can be connected to and
20 disconnected from the adaptor, and an operative position in which the
retainer part blocks removal of the reservoir from the adaptor.

32. The inlet adaptor according to claim 31, wherein the retainer part
has a pair of lugs extending from one side towards the flange and a pair of
25 notches angularly offset from the lugs.

33. The inlet adaptor according to claim 32, wherein the lugs are
received in the recesses in the flange in the operative position of the
retainer part and the notches receive the distal ends of the hook members
30 when engaged with the flange to secure the reservoir to the adaptor.

34. The inlet adaptor according to claim 33, wherein the engagement of the lugs in the recesses of the flange prevents rotation of the retainer part relative to the adaptor and blocks the recesses to prevent passage of the hook members through the recesses until the retainer part has been moved
5 to the inoperative position.

35. The inlet adaptor according to claim 32, wherein the retainer part is rotatable relative to the adaptor to align the lugs with the recesses in the flange. Alternatively, the retainer part may be positioned with the lugs
10 aligned with the recesses and guided for axial movement between the operative position and the inoperative position.

36. The inlet adaptor according to claim 31, wherein the retainer part is releasably held in the operative position.
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37. The inlet adaptor according to claim 31, wherein the retainer part is biased to the operative position.

38. A connector system for securing a reservoir to a spray gun
20 comprising providing connector parts on the gun and reservoir having mateable formations for releasably connecting the reservoir to the gun with an outlet on the reservoir in fluid communication with an inlet on the gun, and a retainer part operable to maintain engagement of the connector parts.

25 39. The connector system according to claim 38, wherein the mateable formations are engageable with a push/twist action with the retainer part being operable to block the reverse action to prevent release of the formations.

30 40. The connector system according to claim 39, wherein the retainer part restricts relative rotation of the formations to a position in which the formations can be disengaged to disconnect the reservoir from the gun.